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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/070,038      | 07/17/2002  | Harald Bruessow      | 112843-042          | 9705             |

29157 7590 09/22/2005

BELL, BOYD & LLOYD LLC  
P. O. BOX 1135  
CHICAGO, IL 60690-1135

EXAMINER

CHOWDHURY, IQBAL HOSSAIN

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1652

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/070,038

Applicant(s)

BRUESSOW ET AL.

Examiner

Iqbal Chowdhury, Ph.D.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-27 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Election/Restrictions***

This application is a 371 of PCT/EP00/07696 filed on July 17, 2002.

The preliminary amendment filed on July 17, 2002 amending claims 2-6 and 8-10 and newly added claims 11-27 has been entered.

Claims 1-27 are pending.

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-7, 9-10 and 18-27, drawn in part to a *S. thermophilus* bacterial strain, a composition, a starter culture and a milk product having mutation at the site of ORF 90 in the bacterial chromosome, which disrupts expression of chorismate mutase chain A or in the  $\phi$ Sfi21 prophage genome.

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Group II, claim(s) 8 and 11-17, drawn in part to a method of preparing a *S. thermophilus* bacterial strain having mutation at the site of ORF90 in the bacterial chromosome, which disrupts expression of chorismate mutase chain A or in the  $\phi$ Sfi21 prophage genome.

Group III, claim(s) 1-7, 9-10 and 18-27, drawn in part to a *S. thermophilus* bacterial strain, a composition, a starter culture and a milk product having mutation at the site of ORF 90 in the bacterial chromosome, which disrupts expression of ORF 394 resulting in the disruption of the expression of oxidoreductase gene or in the  $\phi$ Sfi21 prophage genome.

Group IV, claim(s) 8 and 11-17, drawn in part to a method of preparing a *S. thermophilus* bacterial strain having mutation at the site of ORF 90 in the bacterial chromosome, which disrupts expression of ORF 394 resulting in the disruption of the expression of oxidoreductase gene or in the  $\phi$ Sfi21 prophage genome.

Group V, claim(s) 1-7, 9-10 and 18-27, drawn in part to a *S. thermophilus* bacterial strain, a composition, a starter culture and a milk product having mutation at the site of ORF 90 in the bacterial chromosome, which disrupts expression of ORF 269 resulting in the disruption of the expression of oxidoreductase gene or in the  $\phi$ Sfi21 prophage genome.

Group VI, claim(s) 8 and 11-17, drawn in part to a method of preparing a *S. thermophilus* bacterial strain having mutation at the site of ORF 90 in the bacterial chromosome, which disrupts expression of ORF 269 resulting in the disruption of the expression of oxidoreductase gene or in the  $\phi$ Sfi21 prophage genome.

2. The inventions listed as Groups I - VI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special

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technical features for the following reasons: The special technical feature of Group I is *S. thermophilus* bacterial strain, a composition, a starter culture and a milk product having mutation at the site of ORF90 in the bacterial chromosome, which disrupts expression of chorismate mutase chain A or in the  $\phi$ Sfi21 prophage genome and the special technical feature of Group II is a method of preparing a *S. thermophilus* bacterial strain are each unrelated and distinct entities. The special technical feature of Group III is *S. thermophilus* bacterial strain, a composition, a starter culture and a milk product having mutation at the site of ORF90 in the bacterial chromosome, which disrupts expression of ORF 394 resulting in the disruption of the expression of oxidoreductase gene or in the  $\phi$ Sfi21 prophage genome and the special technical feature of Group IV is a method of preparing a *S. thermophilus* bacterial strain, are each unrelated and distinct entities. The special technical feature of Group V is *S. thermophilus* bacterial strain, a composition, a starter culture and a milk product having mutation at the site of ORF90 in the bacterial chromosome, which disrupts expression of ORF 269 resulting in the disruption of the expression of oxidoreductase gene or in the  $\phi$ Sfi21 prophage genome and the special technical feature of Group VI is a method of preparing a *S. thermophilus* bacterial strain, are each unrelated and distinct entities. The only shared technical feature of these groups is that they all relate to a *S. thermophilus* bacterial strain. However, this shared technical feature is not a special technical feature as defined by PCT Rule 13.2 as it does not define a contribution over the art. According to the search report (PCT form 210), a *S. thermophilus* bacterial strain, which is resistant to bacteriophage, is known in the art. (Sturino J et al. "Construction of bacteriophage resistant strains of *S. thermophilus*---", Journal of Dairy Science, 81: p7, 1998, IDS #1 of NPL) and patent EP-A-0 748871 (NESTLE SA), 12/18/1996 (IDS #1 of Foreign Patent documents).

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Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. **Process claims that depend from or otherwise include all the limitations of the patentable product** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

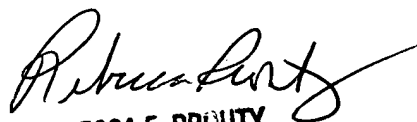
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Iqbal Chowdhury whose telephone number is 571-272-8137. The examiner can normally be reached on 8:30-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy can be reached on 703-272-0928. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Iqbal Chowdhury, Ph.D.,  
Patent Examiner  
Art Unit 1652 (Recombinant Enzymes)  
US Patent and Trademark Office  
Ph. (571)-272-8137  
IC

  
REBECCA E. PROUTY  
PRIMARY EXAMINER  
GROUP 1800-  
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